

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A system for transferring multimedia information from a source location to a destination location through one or more networks, the system comprising:
 - a source output adapted to provide a first stream of information in a first protocol characterized by one of a plurality of source capabilities;
 - a destination input adapted to receive a second stream of information in a second protocol characterized by one of a plurality of destination capabilities;
 - a proxy transcoder server (“PTS”) coupled between the source output and the destination input, wherein the PTS is adapted to perform transcoding of multimedia system protocols, the multimedia system protocols selected from the group consisting of H.320, H.323, H.324, and SIP, the PTS comprising:
 - a capability negotiation module adapted to:
 - perform a capability negotiation process defined by the first protocol to provide ~~identify~~ one source capability of the plurality of source capabilities;
 - determine one or more characteristics of a media channel coupled to the source output and adapted to support the first stream of information; and
 - ~~adapted to~~ identify one destination capability of the plurality of destination capabilities;
 - a selection module adapted to select a transcoding process based upon the one source capability of the plurality of source capabilities and the one destination capability of the plurality of destination capabilities; and
 - a transcoding module adapted to use the selected transcoding process to process the first stream of information.

2. (Previously Presented) The system of claim 1 wherein the one or more networks are selected from a group comprising the Internet, a mobile network, a wide area network, a local area network, PTSN, ISDN, and SONET.

3. (Original) The system of claim 1 wherein at least one of the source output and the destination input is that of a remote device.

4. (Original) The system of claim 3 wherein the capability module identifies at least one of the output and input of the remote device, based on information stored in the device, based on user subscription information stored in a network database of the user's service provider, based on in-band information command and control within a stream exchanged, or pre-set by the service provider.

5. (Original) The system of claim 1 wherein the transcoding process selected by the capability module transcodes data from a first bitstream protocol mode to a second bitstream protocol mode.

6. (Original) The system for claim 1 wherein the PTS further comprising a rate control module regulating the data rate produced by the PTS.

7. (Original) The system for claim 6 wherein the rate control module detects network status information by calculating "round-trip" time information based on network congestion information, bandwidth information, quality information from a network host or network access provider, or internal PTS mechanisms.

8. (Previously Presented) The system for claim 7 wherein the "round-trip" time information can be measured by sending a "ping" packet to either the source location or the destination location.

9. (Original) The system for claim 6 wherein the rate control module detects the network status information by using in-band information.

10. (Original) The system for claim 6 wherein the rate control module regulates the data rate by changing transcoding parameters.

11. (Original) The system for claim 6 wherein the rate control module regulates the data rate by instructing network equipment to give a higher priority to data being handled by the PTS than other data.

12. (Canceled)

13. (Previously Presented) The system of claim 1 wherein the one or more networks are selected from a plurality of different networks, each of the one or more networks being configured for a particular standard.

14. (Original) The system of claim 1 wherein the PTS further comprising a network addressing module to determine the network address of the source output and the network address of the destination input.

15. (Original) The system of claim 1 wherein the PTS further comprising a media mixing process to combine bitstreams associated with two or more audio streams and retransmit the combined bitstreams to the destination input.

16. (Original) The system of claim 1 wherein the PTS further comprising an intellectual property rights management module to manage and process information on intellectual property rights.

17. (Original) The system of claim 1 wherein the PTS further comprising a encryption and decryption process to encrypt and decrypt the data.

18. (Original) The system for claim 6 wherein the rate control module regulates the data rate dynamically and in real time.

19. (Original) The system of claim 1 wherein the transcoding module are programmable to transcode between various types of capabilities for the source output and various types of capabilities for the destination input.

20. (Currently Amended) A system for transferring multimedia information from source to destination locations through one or more networks, the system comprising:

- a source output coupled to a first network and adapted to provide a first stream of information, wherein the source output is adapted to support a first protocol selected from the group consisting of H.320, H.323, H.324, RTSP, and SIP;
- a destination input coupled to a second network and receiving a second stream of information, wherein the destination input is adapted to support a second protocol selected from the group consisting of H.320, H.323, H.324, and SIP;
- a proxy transcoder server ("PTS") coupled between the source output and the destination input, the proxy transcoder server comprising:
 - a capability negotiation process coupled to the source output, the capability negotiation process being adapted to identify the first protocol supported by the source output, determine one or more characteristics of a media channel coupled to the source output, wherein the media channel is adapted to support the first stream of information, and adapted to identify the second protocol supported by the destination input;
 - a transcoding process coupled to the capability process, the transcoding process comprising a plurality of transcoding modules numbered 1 through N, where N is an integer greater than 1, the transcoding process being adapted to select one of the plurality of transcoding modules based upon the first protocol and the second protocol; and
 - a bit rate control process coupled to the transcoding process, the bit rate control process being adapted to receive a network status information from the first network, the bit rate control being adapted to adjust a status of the stream of information based upon the network status information.

21. (Original) The system of claim 20 wherein the status information comprises a ping.

22. (Original) The system of claim 20 wherein the status is a stop status.

23. (Original) The system of claim 20 wherein the status is a prioritization status.

24. (Original) The system of claim 20 wherein the status is to adjust a bit rate by selecting a lower bit rate coder.

25. (Currently Amended) A method for processing streams of information, the method comprising:

~~identifying~~ performing a capability negotiation process defined by a first protocol to provide a source capability from a plurality of source capabilities for a stream of information;

~~identifying~~ performing a capability negotiation process defined by the first protocol to provide a destination capability from a plurality of destination capabilities;

determining one or more characteristics of a media channel coupled to the source output, wherein the media channel is adapted to support the stream of information;

selecting a transcoding process from a plurality of transcoding processes in a library based upon the identified source capability and the identified destination capability, wherein the transcoding process is adapted to transcode from a first protocol selected from the group consisting of H.320, H.323, H.324, RTSP, and SIP to a second protocol selected from the group consisting of H.320, H.323, H.324, and SIP;

processing the stream of information using the selected transcoding process if the identified source capability and the identified destination capability are different; and

transferring the stream of information from the source to the destination free from one of the transcoding processes if the identified source capability and the identified destination capability matches.

26. (Original) The method of claim 25 wherein the selected transcoding process is provided by empirical information.

27. (Original) The method of claim 25 wherein the library is a look up table having at least the plurality of source capabilities and the plurality of destination capabilities in a second dimension.

28. (Currently Amended) The ~~method~~ system of claim 1 wherein the H.324 multimedia system protocol comprises 3GPP-324M.

29. (Currently Amended) The ~~method~~ system of claim 20 wherein at least one of the first protocol or the second protocol is 3GPP-324M.

30. (Previously Presented) The method of claim 25 wherein at least one of the first protocol or the second protocol is 3GPP-324M.

31. (New) The system of claim 1 wherein the capability negotiation process utilizes H.245.

32. (New) The system of claim 1 wherein the capability negotiation process utilizes SDP.

33. (New) The system of claim 1 further comprising:
a second source output adapted to provide a third stream of information in the first protocol characterized by one of a plurality of source capabilities; and

a second transcoding module adapted to use a second transcoding process to process the third stream of information, wherein:

the capability negotiation module is further adapted to determine one or more characteristics of a second media channel coupled to the second source output and adapted to support the third stream of information; and

the selection module is further adapted to select the second transcoding process.

34. (New) The system of claim 33 wherein the media channel comprises a video channel and the second media channel comprises an audio channel.

35. (New) The system of claim 1 wherein the second stream of information comprises a transcoded stream of media converted for transport in the second protocol.

36. (New) The system of claim 1 further comprising performing a second capability negotiation process defined by the second protocol to provide one destination capability of the plurality of destination capabilities.

37. (New) The system of claim 36 wherein the second capability negotiation process translates one or more of the plurality of source capabilities to provide one or more of the plurality of destination capabilities.

38. (New) The system of claim 37 wherein the second capability negotiation process translates one or more of the plurality of source capabilities to provide one or more of the plurality of destination capabilities.